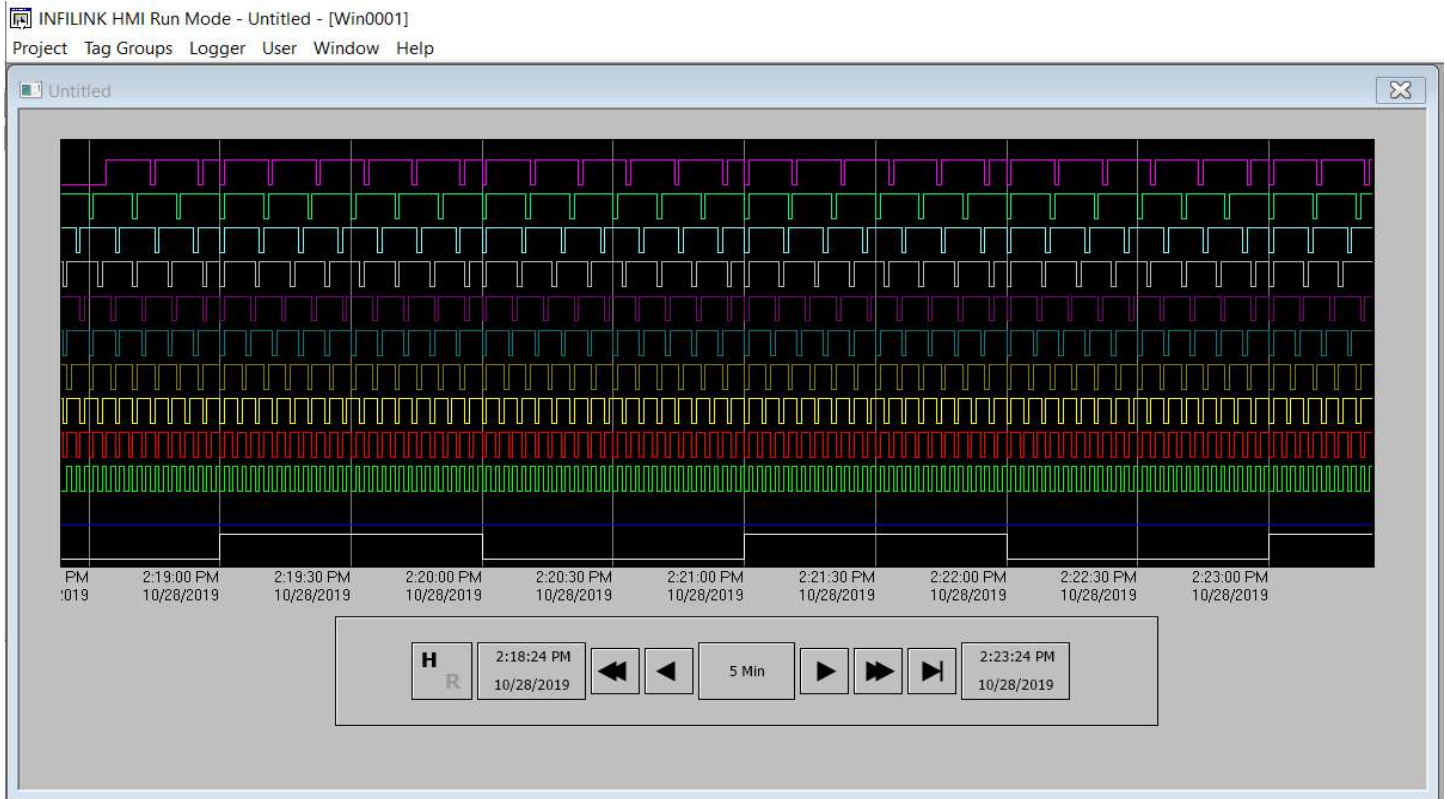


Infilink-HMI Trending Tech Tip: **Displaying discrete tag data in an Infilink-HMI Trend**

This idea was brought to our attention by a longtime Infilink-HMI customer Mark Bunds.

You can plot 12 pens in an Infilink-HMI trend, with each pen having a separate band allocated to it. Then display 12 discrete tags. Here is what the result looks like:



And the trend setup:

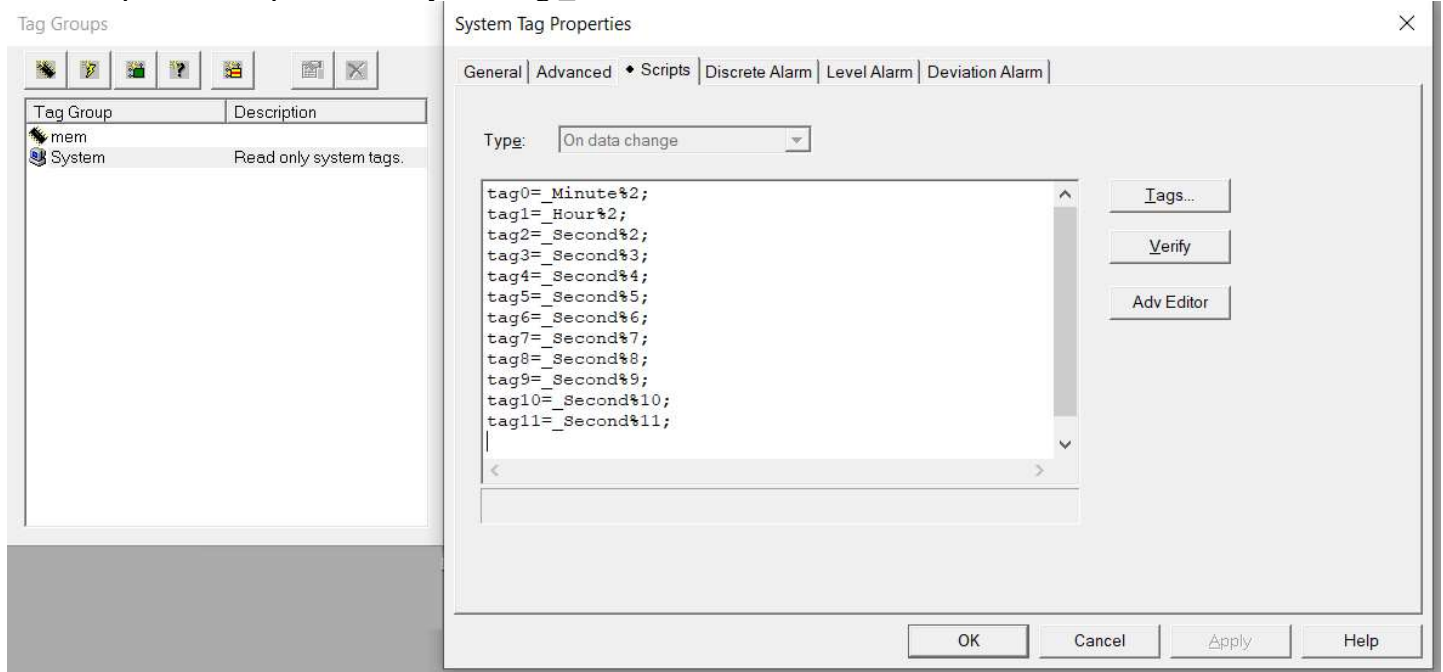
The screenshot shows the 'INFLINK HMI Design Mode - Untitled - [Win0001]' window. The 'Trend Viewer Properties' dialog is open, showing the 'Pens' tab. A table lists the tags and their appearance settings:

Tag Name	Appearance
tag0	[Red line]
tag1	[Green line]
tag2	[Cyan line]
tag3	[Yellow line]
tag4	[Red line]
tag5	[Green line]
tag6	[Cyan line]
tag7	[Yellow line]
tag8	[Red line]

Two 'Pen Properties' dialog boxes are also shown, one for 'tag3' and one for 'tag4'. Both have 'Data Source' set to 'tag3' and 'tag4' respectively. The 'Appearance' section shows 'Color' (Red for tag3, Yellow for tag4) and 'Thickness'. The 'Position on graph' section shows '% Position on graph' (Minimum and Maximum) and 'Value range' (Minimum and Maximum). For tag3, the value range is -0.1 to 1.1. For tag4, the value range is -0.1 to 1.1. The 'History Labels on Cursor' section shows 'Background' (Red for tag3, Yellow for tag4) and 'Text' (Black).

Note that we used -0.1 and 1.1 for the value range, so that there is a little empty space vertically between each pen.

For this sample project, we made 12 memory tags, tag0-tag11, all data type discrete. And to make some fake data, we put this script onto the system tag `_Second`:



Here, we are using modulo division (%) to get the remainder of the division. The remainder will be 0 if the `_second` tag is evenly divisible by the number shown; otherwise the remainder will be ≥ 1 , so the discrete tag will have a value of 1. Tag11, for example, will be 0 only when `_Seconds` equals 0, 11, 22, 33, 44, or 55.